

PEN54
WV 516207
EQT PRODUCTION COMPANY

NAD'27 GRID NORTH

7,342'

BOTTOM HOLE LONGITUDE 80°52'30"

TOP HOLE LONGITUDE 80°55'00"

WELL TIES		
ID	BEARING	DISTANCE
L1	S 50°44' W	1599.83'
L2	S 46°44' E	1686.88'

BUILD OUT DATA		
ID	BEARING	DISTANCE
L3	N 47°15' W	322.38'

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	156.38'	198.93'	N 67°53'52" W	152.38'
C2	179.96'	136.55'	S 39°20'59" W	167.22'
C3	514.73'	995.72'	S 12°16'43" E	509.02'

LATERAL		
ID	BEARING	DISTANCE
L4	S 25°00' E	10788.98'



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Land & Energy Development
Solutions from the ground up.
 P.O. Box 150 • 12 Vanhorn Drive • Glenville, WV 26351 • (304) 462-5634
 www.slsurveys.com

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)
 NAD'27 S.P.C.(FT) N. 279,092.93 E. 1,595,832.12
 NAD'27 GEO. LAT-(N) 39.257460 LONG-(W) 80.927356
 NAD'83 UTM (M) N. 4,345,359.31 E. 506,282.13

LANDING POINT
 NAD'27 S.P.C.(FT) N. 278,742.45 E. 1,595,456.46
 NAD'27 GEO. LAT-(N) 39.256481 LONG-(W) 80.928663
 NAD'83 UTM (M) N. 4,345,250.62 E. 506,169.46

BOTTOM HOLE
 NAD'27 S.P.C.(FT) N. 268,964.48 E. 1,600,016.42
 NAD'27 GEO. LAT-(N) 39.229836 LONG-(W) 80.912019
 NAD'83 UTM (M) N. 4,342,295.02 E. 507,608.38



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.


LEGEND

- LEASE LINE
- SURFACE LINE
- WELL LATERAL
- OFFSET LINE
- TIE LINE
- CREEK
- ROAD
- COUNTY ROUTE
- STATE ROUTE
- PROPOSED WELL
- EXISTING WELL
- PERMITTED WELL
- CLAY DISTRICT TAX MAP-PARCEL

30/07/2016

SCALE 1" = 2000' FILE NO. 8083P516207R2
 DATE JUNE 25, 20 15
 REVISED 07/01/15 & 08/17/16
 OPERATORS WELL NO. WV 516207
 API WELL NO. 47-085-10231
 NO. STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS

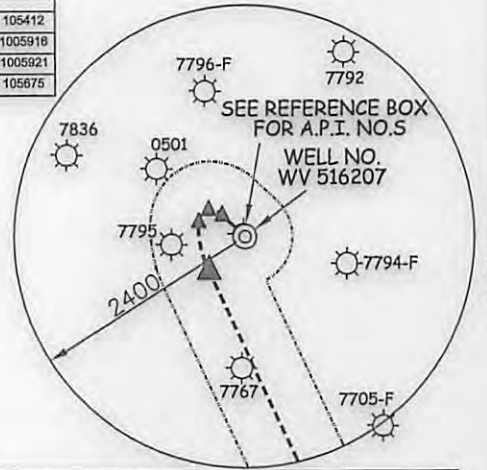


WELL OPERATOR EQT PRODUCTION COMPANY DESIGNATED AGENT REX C. RAY
 ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280
 BRIDGEPORT, WV 26330 BRIDGEPORT, WV 26330

BOTTOM HOLE LATITUDE 39°15'00" 10,487'

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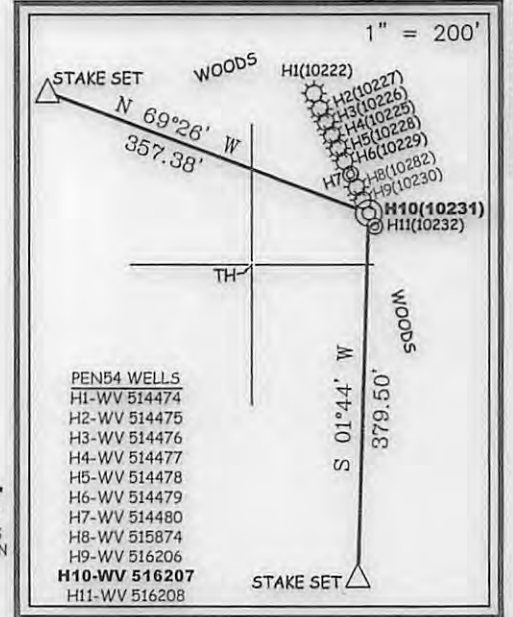
ROYALTY OWNERS		
MABLE BROADWATER ET AL	360 AC±	LEASE NO. 105412
DONALD R. REYNOLDS ET AL	126 AC±	LEASE NO. 1005918
DEAN E. FLANAGAN ET AL	163 AC±	LEASE NO. 1005921
ORMA M. JOHNSON ET AL	557.5 AC±	LEASE NO. 105675



C-TM-31-05	JERRY MORTON ET AL	243.50 ACRES±
C-TM-31-14	HEARTWOOD FORESTLAND FUND IV LP	185.30 ACRES±
C-TM-31-11	HEARTWOOD FORESTLAND FUND IV LP	351.89 ACRES±
C-TM-31-15	HEARTWOOD FORESTLAND FUND IV LP	53 ACRES±
C-TM-31-19	RANDAL LAMM	126.32 ACRES±
C-TM-32-02	COASTAL FOREST RESOURCES COMPANY d/b/a COASTAL TIMBERLANDS COMPANY	42.51 ACRES±
C-TM-32-03	COASTAL FOREST RESOURCES COMPANY d/b/a COASTAL TIMBERLANDS COMPANY	56.14 ACRES±
C-TM-32-04	COASTAL FOREST RESOURCES COMPANY d/b/a COASTAL TIMBERLANDS COMPANY	47 ACRES±
C-TM-36-5.1	RANDAL LAMM	44 ACRES±
C-TM-36-05	RONNIE WAGES	66.95 ACRES±
C-TM-32-05	COASTAL FOREST RESOURCES COMPANY d/b/a COASTAL TIMBERLANDS COMPANY	66.45 ACRES±
C-TM-32-07	COASTAL FOREST RESOURCES COMPANY d/b/a COASTAL TIMBERLANDS COMPANY	57.60 ACRES±
C-TM-37-03	JACK MACKAY ET AL	235.03 ACRES±
C-TM-37-02	RONALD DODD ET AL BH	70.40 ACRES±
C-TM-37-04	JEFFERY JETT	18.31 ACRES±
C-TM-37-05	EDWIN G. WILLIAMS	40.77 ACRES±
C-TM-37-5.1	EDWIN G. WILLIAMS ET AL	23 ACRES±
C-TM-37-07	MARY SIMMONS (LIFE) ET AL	30 ACRES±
C-TM-37-08	REBECCA COTTRILL ET AL	4.3 ACRES±
C-TM-36-23	CHARLES E. COTTRILL ET AL	16.15 ACRES±
C-TM-37-5.2	ROGER & MARY WILLIAMS	8,068 ACRES±
C-TM-36-21.1	JEFFERY JETT	25,015 ACRES±
C-TM-36-21	JUNIOR COTTRILL ET AL	33,065 ACRES±
C-TM-36-21.2	JEFFERY JETT	0.472 ACRES±
C-TM-36-11.4	GARY COTTRILL	5,051 ACRES±
C-TM-36-13	ROY DODD	2.51 ACRES±
C-TM-36-11.5	GARY COTTRILL	40,847 ACRES±
C-TM-36-11	GARY COTTRILL ET AL	23,322 ACRES±
C-TM-36-11.1	PAUL COTTRILL	1.07 ACRES±
C-TM-36-11.2	JEFFERY & HEATHER MACE	0.50 ACRES±
C-TM-36-11.3	SHAWN GIBBONS	1,563 ACRES±
C-TM-36-11.6	GARY COTTRILL	0.94 ACRES±
C-TM-36-20	EVERETT McATEE ET AL	48,88 ACRES±
C-TM-36-09	PAUL HILVERS	90.70 ACRES±
C-TM-36-9.1	RANDALL & CYNTHIA OWENS	3,9997 ACRES±
C-TM-36-08	FOUSS FARMS LLC	19 ACRES±
C-TM-36-04	JACK HARGIS ET AL	45.47 ACRES±
C-TM-36-03	RANDAL LAMM	45.5 ACRES±
C-TM-31-14.1	HEARTWOOD FORESTLAND FUND IV LP	168.20 ACRES±
C-TM-31-10	DONALD DEEM ET AL	133.07 ACRES±
C-TM-31-06	HEARTWOOD FORESTLAND FUND IV LP	79.88 ACRES±

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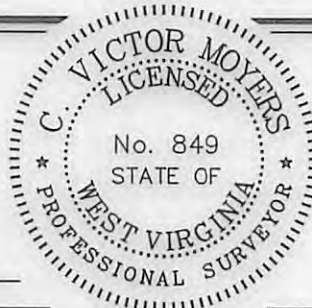
REFERENCES



NOTES ON SURVEY

- NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS > 2500 SQ. FT. OR DWELLINGS WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
- WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'.

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I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DIVISION OF ENVIRONMENTAL PROTECTION.

P.S. C. Victor Moyers
849

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8083P516207R2.dwg
 HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK) SCALE SEE NOTE 2

STATE OF WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL IF "GAS" PRODUCTION STORAGE DEEP SHALLOW

LOCATION: PAD ELEVATION 1,016' WATERSHED NORTH FORK HUGHES RIVER
 DISTRICT CLAY COUNTY RITCHIE QUADRANGLES PENNSBORO & PULLMAN 7.5'

SURFACE OWNER JERRY MORTON ET AL ACREAGE 243.50±
 ROYALTY OWNER ELLEN S. FRANCAVIGLIA ET AL ACREAGE 268±

PROPOSED WORK: LEASE NO. 105403
 DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER

PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION MARCELLUS
 ESTIMATED DEPTH 6,305'

WELL OPERATOR EQT PRODUCTION COMPANY DESIGNATED AGENT REX C. RAY
 ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330 ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330

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12,459'

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COUNTY NAME

PERMIT

10/07/2016